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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of

Dated: January 23, 2007

GARY CARLSON
and GEORGE McILVAINE

HP Docket No. 200209331-1

Serial No. : 10/763,352

Examiner Q. Grainger

Filed : January 23, 2004

Group Art Unit 2852

For : PRINTING DEVICE WITH LAMINATING FUNCTIONALITY

Mail Stop Appeal Brief-Patents
Commissioner for Patents
P. O. Box 1450
Alexandria, Virginia 22313-1450

Sir:

AMENDED BRIEF OF APPELLANTS

This Amended Brief is presented in opposition to the Examiner's final rejection of claims 1-6, 8-14, 16, and 17 in the final Office action dated June 23, 2006. Pursuant to the Notification of Non-Compliant Appeal Brief dated January 8, 2007, this Amended Brief corrects Heading VI in accordance with the Notification of Non-Compliant Appeal Brief, and is intended to replace the Brief of Appellants filed November 20, 2006.

I. REAL PARTY IN INTEREST

The real party in interest is Hewlett-Packard Development Company, LP, a limited partnership established under the laws of the State of Texas and having a principal place of business at 20555 S.H. 249 Houston, TX 77070, U.S.A. (hereinafter "HPDC"). HPDC is a Texas limited partnership and is a wholly-owned affiliate of

Hewlett-Packard Company, a Delaware Corporation, headquartered in Palo Alto, CA.

The general or managing partner of HPDC is HPQ Holdings, LLC.

II. RELATED APPEALS AND INTERFERENCES

There are no known related appeals or interferences.

III. STATUS OF CLAIMS

The present application was filed on January 23, 2004, with original claims 1 - 18. A first Office action was mailed February 15, 2005. Appellants cancelled claims 15 and 18, and amended claims 1, 2, 4-10, 13, and 14 in their May 10, 2005 response to the first Office action. A final Office action was mailed July 26, 2005. Appellants amended page 5 of the specification in their response sent September 26, 2005. An Office action was sent October 24, 2005. Appellants responded on November 18, 2005 by canceling claim 7 and amending claim 13. An Office action was sent February 9, 2006. Appellants responded on April 11, 2006 by amending claims 5, 13, 14, 16, and 17. A final Office action was mailed June 23, 2006. Appellants responded with remarks on August 23, 2006. An Advisory Action was mailed September 8, 2006 removing an objection to claim 5 and otherwise maintaining the June 23, 2006 rejections of all the pending claims.

Pending claims 1-6, 8-14, 16, and 17 are the claims at issue in this appeal.

IV. STATUS OF AMENDMENTS

No amendments have been made subsequent to the final Office action dated June 23, 2006.

V. SUMMARY OF CLAIMED SUBJECT MATTER

The claimed subject matter is set forth in exemplary embodiments, which are shown and described in the application as originally filed. Particular locations in the specification and drawings are cited below in support of such claimed subject matter.

The claims at issue in this appeal are directed to a method of using a printing device having a toner fuser to laminate a media sheet with at least one laminate material sheet, and to the printing device itself.

In particular, independent claim 1 is directed to a method of using a printing device having a toner fuser to laminate a media sheet with at least one laminate material sheet, an example of which is shown in the flowchart in Fig. 8, and is described in the specification on page 8, line 29 to page 10, line 2. The claimed method involves receiving (102) a laminate request; identifying (110) the composite media; adjusting (112) a characteristic of the toner fuser of the printing device based on the identified composite media; and passing (118) the composite media through the toner fuser to effect lamination within the printing device.

Independent claim 5 also is directed to a method of using a printing device having a toner fuser to laminate a media sheet with at least one laminate material sheet, an example of which is shown by flowchart in Fig. 8, and described in the specification on page 8, line 29 to page 10, line 2. The claimed method includes receiving (102) a laminate request; adjusting (112) the pressure exerted by the toner fuser based on identifying the media sheet and the laminate material sheet; and passing (118) the

media sheet and the at least one laminate material sheet through the toner fuser to effect lamination within the printing device.

Independent claim 9 is directed to a method of using a printing device having a toner fuser to laminate a media sheet with at least one laminate material sheet, an example of which is shown in Fig. 8, and is described in the specification on page 8, line 29 to page 10, line 2. The claimed method includes receiving (102) a laminate request; adjusting (112) a characteristic of the toner fuser of the printing device; receiving (114) the media sheet and at least one laminate material sheet into a media-transport path in the printing device, wherein receiving the media sheet and at least one laminate material sheet includes receiving the media sheet and at least one laminate material sheet from an automatic feed tray of the printing device; passing (118) the media sheet and the at least one laminate material sheet through the toner fuser to effect lamination within the printing device; and outputting (120) a laminated media sheet from the media-transport path.

Independent claim 10 is directed to a method of using a printing device having a toner fuser to laminate a media sheet with at least one laminate material sheet, an example of which is shown in Fig. 8, and is described in the specification on page 8, line 29 to page 10, line 2. The method includes receiving (102) a laminate request; displaying (106) instructions on a device display, the instructions defining how to configure the printing device to effect lamination; configuring (112) a characteristic of the toner fuser of the printing device; and passing (118) the media sheet and the at

least one laminate material sheet through the toner fuser to effect lamination within the printing device.

Independent claim 13 is directed to a device with a selectively operable bypass of an image transfer mechanism, an example of which is shown in Figs. 1 and 2, and is described in the specification on page 2, line 19 to page 7, line 16. The device (10) has a media-transport path (24) having at least one media input (16, 22) and at least one media output (20), wherein the media-transport path includes a selectively operable bypass of the image-transfer mechanism (30); an image-transfer mechanism (30) positioned along the media-transport path (24); and a fuser system (32) positioned along the media-transport path (24), downstream of the image-transfer mechanism (30), and configured with at least one adjustable fusing characteristic to selectively alternatively effect either fusing of toner to a media sheet, or lamination of the media sheet to a laminate material sheet passed through the fuser system with the media sheet.

VI. GROUND OF REJECTION TO BE REVIEWED ON APPEAL

A. Are claims 1-6, 8-9, 12-14, and 16-17 properly rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,894,318 to Endo et al. (Endo) in view of U.S. Patent No. 4,549,803 to Ohno et al. (Ohno)?

B. Are claims 10 and 11 properly rejected under 35 U.S.C. § 103(a) as being unpatentable over Endo in view of Ohno and U.S. Patent No. 6,516,178 to Fukushima (Fukushima)?

VII. ARGUMENT

Appellants assert that the Examiner has failed to establish *prima facie* obviousness of claims 1-6, 8-14, 16, and 17, and thus that the rejections under 35 U.S.C. § 103(a) are improper.

A. Rejections under 35 U.S.C. § 103(a)

i. *Prima facie obviousness*

The burden of establishing a *prima facie* case of obviousness can only be satisfied by a showing of some objective teaching in the prior art that would lead an individual to combine the relevant teachings of the references. Under 35 U.S.C. § 103, teachings of references can be combined only if there is some suggestion or incentive to do so. The mere fact that the prior art may be modified in the manner suggested by the Examiner does not make the modification obvious unless the prior art also suggests the desirability of the modification.

The law is “clear that the best defense against the subtle but powerful attraction of a hindsight-based obviousness analysis is rigorous application of the requirement for a showing of the teaching or motivation to combine prior art references.” In re Dembiczak, 175 F.3d 994, 999, 50 USPQ2d 1614, 1617 (Fed. Cir. 1999) (citations omitted).

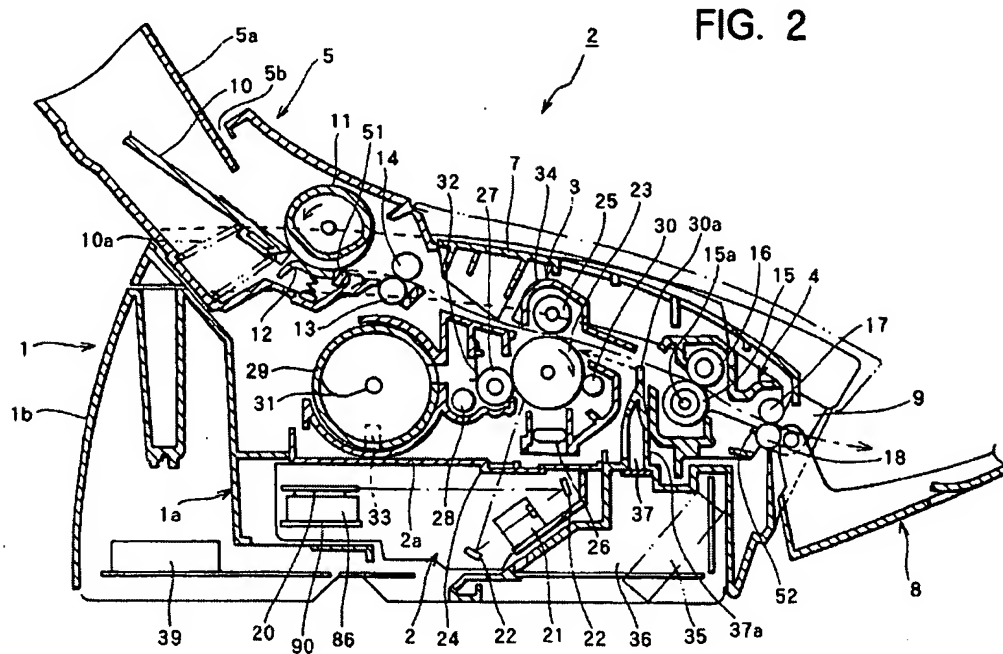
In applying 35 U.S.C. § 103, the references must suggest the desirability, and thus, the obviousness of making the combination. As stated by the Federal Circuit in In re Fritch, 972 F.2d 1260, 23 USPQ2d 1780 (Fed. Cir. 1992):

[T]he Examiner bears the burden of establishing a prima facie case of obviousness based upon the prior art. 'The Examiner can satisfy this burden only by showing some objective teaching in the prior art or that knowledge generally available to one of ordinary skill in the art would lead that individual to combine the relevant teachings of the references.' ... Under section 103, teachings of references can be combined only if there is some suggestion or incentive to do so. ... This court has previously stated that '[o]ne cannot use hindsight reconstruction to pick and choose among isolated disclosures in the prior art to deprecate the invention.'

Id. at 1265-1266 (citations omitted). In the present application the only indication of a teaching or motivation the Examiner gives to combine Endo and Ohno is based on an erroneous reading of Ohno. Because of this, the Examiner misses that Ohno and Endo teach solutions to different technological problems and thus are nonanalogous art, inappropriate for use in a rejection under 35 U.S.C. § 103. To rely on a reference as the basis for rejection of an applicant's invention, the reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the inventor was concerned. MPEP 2141.01(a).

ii. **The Endo patent**

Endo relates to a printer that may also provide lamination conditions. Fig. 2 shows the components of the Endo device:



The device of Endo includes a process unit 3 that acts as an image transfer portion of a printer, for placing an image on a document. Image fixing unit 4 is located near the image transfer portion, and contains a heat roller 15 and a pressure roller 16. Heat roller 15 is heated by an internal electrical resistance heater 15a. The speed and temperature of the rollers of the device are controlled to provide for lamination or printing within the device (Endo col. 11, lines 25-35).

The Ohno patent

Ohno describes a printer that can print color images on a resin-based overhead projector film. Fig. 2 shows the color-fixing components of the Ohno device:

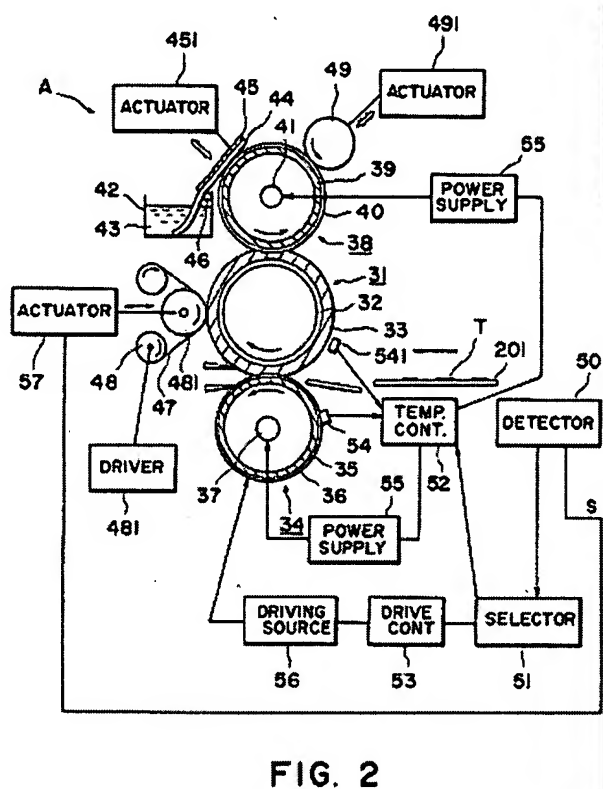


FIG. 2

The device of Ohno includes a fixing roller **31** heated by a heating roller **38**. A second fixing roller **34** is heated by an internal infrared lamp heater **37**. A cleaning web **47** is used to clean roller **31** after fixation of printer toner onto an overhead projector sheet. The printer is configured such that the surface of roller **34** (which is away from the toner on the overhead projector sheet) is hotter than the surface of roller **31** (which contacts the toner and melts it to the sheet). The device of Ohno is configured to reduce the problem of color toner adhering to the rollers when color toner is fixed to a

resin-based overhead projector sheet (Ohno col. 6, lines 24-37). Selector means 51 simultaneously changes the temperature and speed of rollers 31 and 34 to optimize fixation of color toner to an inserted overhead projector sheet.

B. Claim Rejections

As noted above, all of the pending claims stand rejected under 35 U.S.C. § 103(a) in view of a combination of at least Endo with Ohno. Because the rejections of claims 10 and 11 only add Fukushima to Endo and Ohno, Appellants will address those rejections herewith. Appellants respectfully traverse the rejections.

i. Claims 1-4, 6-8, 10-14, and 16-17

Appellants believe that the combination of Endo with Ohno is inappropriate and does not make obvious the subject matter of the pending claims. Ohno does not provide the claim element for which the Examiner cites the reference, and Ohno is not of the same field of endeavor as Endo, as it does not address the same technical problem.

First, the rejections in view of Endo and Ohno are inappropriate because Ohno does not provide the claim elements missing from Endo. The Office action states that “Ohno et al. teaches changing the characteristics of the toner fuser...when laminating a document with laminating material (column 6, lines 44-55).” (Final Office action, pg. 3). Appellants have reviewed the cited passage, and the rest of Ohno, and disagree with this characterization of the subject matter of Ohno. Though Ohno discusses, in the cited section, changing the temperature and speed of a roller in a printer, Ohno does so in the context of determining the best conditions for fixing color toner on an overhead

projector sheet. As stated in the Summary of the Invention of Ohno: "The present invention is therefore aimed at a recording apparatus...which can increase the ability of *fixation of images*, particularly color images to synthetic resin films." (Ohno, col. 3, lines 19-24; emphasis added). As such, Ohno does not teach adjusting the temperature and speed of a toner fuser when *laminating* a document.

Second, the rejections in view of Endo and Ohno are inappropriate because Ohno is not analogous art with Endo, or with the present disclosure, when the disclosure of Ohno is considered as a whole, as it must be. A prior art reference must be considered in its entirety, including portions that would lead away from the claimed invention. MPEP § 2141.02. While Ohno is structurally similar to Endo and Appellants' claimed invention, the problem solved in Ohno is not of the same field of endeavor as Endo and the claimed invention. As noted above, Ohno is directed toward determining the optimal conditions useful for fixing toner to a resin-based overhead projector sheet. In contrast, the claimed invention is directed toward partially melting, and fixing together, a resin sheet with another resin sheet or with a media sheet.

Not only is Ohno non-analogous art with Endo and Appellants' claimed invention, Ohno teaches away from its combination with Endo. In switching from a printing mode to a laminating mode, Endo teaches that one should slow down a transport speed by about 90% and simultaneously *increase* a temperature within a printing device (Endo, col. 11, lines 25-35). In contrast, Ohno teaches that when switching from printing on paper to printing on a resin sheet one should slow down the transport speed by about 80% but also *decrease* the temperature. (Ohno, col. 8, lines 27-42). In other words,

Ohno teaches altered resin-printing conditions that are incompatible with performing a lamination function in a printer. Ohno explicitly teaches printing conditions that require a change in conditions opposite to that suggested by Endo. The modification suggested by Ohno would make the printer of Endo unsuitable for its intended purpose. This makes clear that Ohno attempts to, and does, solve a different problem than Endo, and thus is not analogous art to Endo and the claimed invention.

Because Ohno is directed to solving a different technical problem than is Endo, and because Ohno teaches away from a combination with Endo, Appellants respectfully request that the rejections of claims 1-4, 6-8, and 12 be withdrawn and the pending claims allowed. The rejections of claims 10 and 11 were made based on the same combination, with the addition of Fukushima, and suffer from the same flaw. Thus, the rejections of those claims should be withdrawn and claims 10 and 11 should be allowed, as well.

ii. **Claim 5**

As noted above, claim 5 recites that the *pressure* of the toner fuser is adjusted “based on identifying the media sheet and the laminate material sheet.” Appellants note that neither Endo nor Ohno discloses adjusting a pressure applied by a toner fuser much less adjusting the pressure of the toner fuser based on identified media. The Examiner asserts that this claim element is made obvious by the disclosure in Ohno of changes to the temperature and speed of the fuser because “changing the pressure also changes the fusing ability” (Advisory Action, pg. 2). Appellants note, however, that the Examiner still has not pointed to a disclosure of changing the pressure of a toner

fuser in either Endo or Ohno. Because the Examiner cannot make that showing, neither Endo nor Ohno, nor the combination of them, can render obvious the subject matter of the pending claim. Accordingly, Appellants respectfully request withdrawal of the rejection of claim 5 and allowance of the pending claim.

iii. **Claim 9**

Claim 9 was rejected in view of Endo and Ohno, the Examiner having indicated that "a manual feed tray is an automatic feed tray. Appellants believe that the plain meanings of "manual" and "automatic" are being disregarded to facilitate this rejection. The final Office action of June 23, 2006 concedes that a manual feed tray is not an automatic feed tray when it states that "the user inserts a media sheet." (Office action, pg. 4). An automatic feed tray, as recited in claim 9, does not require a user to insert a media sheet immediately prior to performing a laminating function, as it already contains the necessary materials and can be used as a source of materials independently of a "user insert[ing] a media sheet." Appellants' specification is consistent with the different meanings of "automatic" and "manual" feed trays. An automatic feed tray is one that, for example, could be said to "store paper to be introduced into a media-transport path." (Specification, pg. 3, lines 1-2). A manual feed tray, on the other hand, is one into which a user must place media just prior to its being used in a device. (Specification, pg. 8, lines 10-12). That there is a difference between a manual feed tray and an automatic feed tray, as Appellants have used those terms, is obvious by their being shown as different structures in the Figures. An automatic feed tray is shown in Figures 1 and 2, at 22, while a manual feed tray is shown in Figures 1 and 2, at 16. Because a

manual feed tray is not an automatic feed tray, in view of the plain meanings of those terms to one of skill in the art, and in view of the different meanings given those terms in the present specification, Appellants respectfully request withdrawal of the rejection of claim 9 and allowance of the claim.

C. Summary

Appellants assert that the Examiner has not established the *prima facie* obviousness of claims 1-14, 16, and 17. Ohno does not teach lamination, for which it was cited by the Examiner. As well, Ohno is directed toward a different technical problem than are Endo and Appellants' disclosure. As such, the combination of Endo and Ohno is inappropriate and does not make obvious the pending claims. Regarding claim 5, neither Endo nor Ohno discloses adjusting a toner fuser *pressure* based on identifying a media sheet and a laminate material sheet. Regarding claim 9, neither Endo nor Ohno teaches using an automatic feed tray in a lamination method, and a manual feed tray, in its plain meaning, is not an automatic feed tray. Accordingly, the rejection of claims 1-14, 16, and 17 is improper.

VIII. CLAIMS APPENDIX

1. A method of using a printing device having a toner fuser to laminate a composite media including media sheet with at least one laminate material sheet, the method comprising:
receiving a laminate request;
identifying the composite media;
adjusting a characteristic of the toner fuser of the printing device based on the identified composite media; and
passing the composite media through the toner fuser to effect lamination within the printing device.
2. The method of claim 1, wherein passing the composite media through the toner fuser includes passing the media sheet through the toner fuser interposed a pair of laminate material sheets.
3. The method of claim 1, wherein adjusting the characteristic of the toner fuser includes adjusting a temperature of the toner fuser.
4. The method of claim 1, wherein adjusting the characteristic of the toner fuser includes adjusting the speed at which the composite media passes through the toner fuser.

5. A method of using a printing device having a toner fuser to laminate a media sheet with at least one laminate material sheet, the method comprising:

receiving a laminate request;

adjusting the pressure exerted by the toner fuser based on identifying the media sheet and the laminate material sheet; and

passing the media sheet and the at least one laminate material sheet through the toner fuser to effect lamination within the printing device.

6. The method of claim 1, further comprising:

receiving the composite media into a media-transport path in the printing device;

transporting the composite media along the media-transport path through the toner fuser; and

outputting a laminated media sheet from the media-transport path.

8. The method of claim 6, wherein receiving the composite media includes receiving the media sheet and at least one laminate material sheet from a manual feed tray of the printing device.

9. A method of using a printing device having a toner fuser to laminate a media sheet with at least one laminate material sheet, the method comprising:

receiving a laminate request;

adjusting a characteristic of the toner fuser of the printing device;

receiving the media sheet and at least one laminate material sheet into a media-transport path in the printing device, wherein receiving the media sheet and at least one

laminate material sheet includes receiving the media sheet and at least one laminate material sheet from an automatic feed tray of the printing device;

passing the media sheet and the at least one laminate material sheet through the toner fuser to effect lamination within the printing device; and

outputting a laminated media sheet from the media-transport path.

10. A method of using a printing device having a toner fuser to laminate a media sheet with at least one laminate material sheet, the method comprising:

receiving a laminate request;

displaying instructions on a device display, the instructions defining how to configure the printing device to effect lamination;

configuring a characteristic of the toner fuser of the printing device; and

passing the media sheet and the at least one laminate material sheet through the toner fuser to effect lamination within the printing device.

11. The method of claim 10, wherein displaying instructions includes displaying instructions to open and load a manual feed tray.

12. The method of claim 1, wherein receiving the laminate request includes receiving the laminate request via a printing device user interface.

13. A device comprising:

a media-transport path having at least one media input and at least one media output, wherein the media-transport path includes a selectively operable bypass of the image-transfer mechanism;

an image-transfer mechanism positioned along the media-transport path; and

a fuser system positioned along the media-transport path, downstream of the image-transfer mechanism, and configured with at least one adjustable fusing characteristic to selectively alternatively effect either fusing of toner to a media sheet, or lamination of the media sheet to a laminate material sheet passed through the fuser system with the media sheet.

14. The device of claim 13, wherein the at least one adjustable fusing characteristic includes one or more of fuser temperature, fuser speed, and fuser pressure.

16. The device of claim 13, wherein the input of the media-transport path includes a manual feed tray.

17. The device of claim 14, wherein the media-transport path moves media substantially in a first direction.

IX. EVIDENCE APPENDIX

None.

X. RELATED PROCEEDINGS APPENDIX

None.



Respectfully submitted,

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CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Mail Stop Appeal Brief-Patents, Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450 on January 23, 2007.

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